

1 1. An isolated nucleic acid molecule selected from
2 the group consisting of:

3 a) a nucleic acid molecule comprising a nucleotide
4 sequence that is at least 65% identical to the nucleotide
5 sequence of SEQ ID NO:1 or SEQ ID NO:3, or a complement
6 thereof;

7 b) a nucleic acid molecule comprising a fragment of
8 at least 300 nucleotides of the nucleotide sequence of SEQ
9 ID NO:1 or SEQ ID NO:3, or a complement thereof;

10 c) a nucleic acid molecule that encodes a
11 polypeptide comprising the amino acid sequence of SEQ ID
12 NO:2;

13 d) a nucleic acid molecule that encodes a fragment of
14 a polypeptide comprising the amino acid sequence of SEQ ID
15 NO:2, wherein the fragment comprises at least 15 contiguous
16 amino acid residues of SEQ ID NO:2; and

17 e) a nucleic acid molecule that encodes a naturally
18 occurring allelic variant of a polypeptide comprising the
19 amino acid sequence of SEQ ID NO:2, wherein the nucleic acid
20 molecule hybridizes to a nucleic acid molecule comprising
21 SEQ ID NO:1 or SEQ ID NO:3 under stringent conditions.

1 2. The isolated nucleic acid molecule of claim 1,
2 which is selected from the group consisting of:

3 a) a nucleic acid molecule comprising the nucleotide
4 sequence of SEQ ID NO:1 or SEQ ID NO:3 or a complement
5 thereof; and

6 b) a nucleic acid molecule that encodes a polypeptide
7 comprising the amino acid sequence of SEQ ID NO:2.

1 3. The nucleic acid molecule of claim 1, further
2 comprising vector nucleic acid sequences.

1 4. The nucleic acid molecule of claim 1, further
2 comprising nucleic acid sequences encoding a heterologous
3 polypeptide.

1 5. A host cell containing the nucleic acid molecule
2 of claim 1.

1 6. The host cell of claim 4, which is a mammalian
2 host cell.

1 7. A non-human mammalian host cell containing the
2 nucleic acid molecule of claim 1.

1 8. An isolated polypeptide selected from the group
2 consisting of:

3 a) a fragment of a polypeptide comprising the amino
4 acid sequence of SEQ ID NO:2, wherein the fragment comprises
5 at least 15 contiguous amino acids of SEQ ID NO:2;

6 b) a naturally occurring allelic variant of a
7 polypeptide comprising the amino acid sequence of SEQ ID
8 NO:2, wherein the polypeptide is encoded by a nucleic acid
9 molecule that hybridizes to a nucleic acid molecule
10 comprising SEQ ID NO:1 or SEQ ID NO:3 under stringent
11 conditions;

12 c) a polypeptide that is encoded by a nucleic acid
13 molecule comprising a nucleotide sequence that is at least
14 60% identical to a nucleic acid molecule comprising the
15 nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:3.

1 9. The isolated polypeptide of claim 8, comprising
2 the amino acid sequence of SEQ ID NO:2.

1 10. The polypeptide of claim 8, further comprising
2 heterologous amino acid sequences.

1 11. An antibody that selectively binds to a
2 polypeptide of claim 8.

1 12. A method for producing a polypeptide selected from
2 the group consisting of:

3 a) a polypeptide comprising the amino acid sequence
4 of SEQ ID NO:2;

5 b) a fragment of a polypeptide comprising the amino
6 acid sequence of SEQ ID NO:2, wherein the fragment comprises
7 at least 15 contiguous amino acids of SEQ ID NO:2; and

8 c) a naturally occurring allelic variant of a
9 polypeptide comprising the amino acid sequence of SEQ ID
10 NO:2, wherein the polypeptide is encoded by a nucleic acid
11 molecule that hybridizes to a nucleic acid molecule
12 comprising SEQ ID NO:1 or SEQ ID NO:3 under stringent
13 conditions;

14 the method comprising culturing the host cell of
15 claim 5 under conditions in which the nucleic acid molecule
16 is expressed.

1 13. The isolated polypeptide of claim 8 comprising the
2 amino acid sequence of SEQ ID NO:2.

1 14. A method for detecting the presence of a
2 polypeptide of claim 8 in a sample, comprising:

3 a) contacting the sample with a compound that
4 selectively binds to a polypeptide of claim 8; and

5 b) determining whether the compound binds to the
6 polypeptide in the sample.

1 15. The method of claim 14, wherein the compound that
2 binds to the polypeptide is an antibody.

1 16. A kit comprising a compound that selectively binds
2 to a polypeptide of claim 8 and instructions for use.

1 17. A method for detecting the presence of a nucleic
2 acid molecule of claim 1 in a sample, comprising the steps
3 of:

4 a) contacting the sample with a nucleic acid probe or
5 primer that selectively hybridizes to the nucleic acid
6 molecule; and

7 b) determining whether the nucleic acid probe or
8 primer binds to a nucleic acid molecule in the sample.

1 18. The method of claim 17, wherein the sample
2 comprises mRNA molecules and is contacted with a nucleic
3 acid probe.

1 19. A kit comprising a compound that selectively
2 hybridizes to a nucleic acid molecule of claim 1 and
3 instructions for use.

1 20. A method for identifying a compound that binds to
2 a polypeptide of claim 8 comprising the steps of:

3 a) contacting a polypeptide of claim 8, or a cell
4 expressing a polypeptide of claim 8, with a test compound;
5 and

6 b) determining whether the polypeptide binds to the
7 test compound.

1 21. The method of claim 20, wherein the binding of the
2 test compound to the polypeptide is detected by a method
3 selected from the group consisting of:

4 a) detection of binding by direct detecting of test
5 compound/polypeptide binding; and

6 b) detection of binding using a competition binding
7 assay.

1 22. A method for modulating the activity of a
2 polypeptide of claim 8, the method comprising contacting a
3 polypeptide of claim 8 or a cell expressing a polypeptide of
4 claim 8 with a compound that binds to the polypeptide in a
5 sufficient concentration to modulate the activity of the
6 polypeptide.

1 23. A method for identifying a compound that modulates
2 the activity of a polypeptide of claim 8, comprising:

3 a) contacting a polypeptide of claim 8 with a test
4 compound; and

5 b) determining the effect of the test compound on the
6 activity of the polypeptide to thereby identify a compound
7 that modulates the activity of the polypeptide.

Added A2